

## CLAIMS:

1. A method for storing and/or changing a state information item of a memory (2) containing a plurality of memory cells (3), wherein the memory cells (3) assume an irreversible memory state as a result of a programming step, wherein the state information is represented by a number and/or position of memory cells (3) existing or programmed in an irreversible memory state, said method comprising the steps presented in the following:
  - 5 determining the state information (S3, S13) by checking the memory state of the memory (2) and selecting (S4, S14) an unprogrammed memory cell (3) and programming (S5, S15) the selected memory cell (3) during and/or for changing the state information of the memory (2).
- 10 2. A method according to claim 1, wherein, prior to determination of the state information, an encryption of data and/or a verification of an access authorization to the memory (2) is carried out.
- 15 3. A method according to claim 1 or 2, wherein, for determining the state information of the memory, a serial output (12) of the memory (2) is fed to a counter or a toggle flip-flop (17), whereby the number of memory cells (3) programmed or in an irreversible memory state and/or the position of an unprogrammed memory cell is determined.
- 20 4. A method according to claim 3, wherein timing pulses are applied to memory (2) and by verifying the timing pulses at the serial output (12) of the memory (2), a position of an unprogrammed memory cell is determined.
- 25 5. An integrated circuit for storing and/or changing state information of a memory (2) containing a plurality of memory cells (3), wherein the memory cells (3) assume an irreversible memory state as a result of a programming step, said integrated circuit containing a programming unit (8) for programming the memory cells (3) and a feed-logic circuit (9), said feed-logic circuit (9) being provided for picking up and emitting data for programming and determining the state information of memory (2).

6. An integrated circuit according to claim 5, wherein a serial output (12) of the feed-logic circuit (9) interacts with an evaluation unit (17, 19) for determining the state information and for selecting an unprogrammed memory cell (3).

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7. An integrated circuit according to claim 6, wherein the serial output (12) of the feed-logic circuit (9) interacts with a counter or a toggle flip-flop (17), in order to determine the number of memory cells (3) programmed or being in an irreversible memory state and/or the position of an unprogrammed memory cell (3).

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8. An integrated circuit according to claim 6 or 7, wherein additionally a circuit (7) is provided for the verification and/or encryption of data.

9. An integrated circuit according to any one of the claims 5 to 8, wherein  
15 additionally a memory is provided for additional storage of preset data and/or data that can be entered via an input device.

10. A data carrier containing an integrated circuit according to any one of the claims 5 to 9.

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11. A data carrier according to claim 10, wherein the data carrier is designed for contactless communication with a communication station.

12. A data carrier according to claim 10 or 11, wherein the data carrier is in the  
25 form of a tag or label.